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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/887,630      | 06/22/2001  | Hans Carlsson        | 4015-955            | 7398             |

24112 7590 07/09/2003

COATS & BENNETT, PLLC  
P O BOX 5  
RALEIGH, NC 27602

EXAMINER

PHILPOTT, JUSTIN M

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2665

DATE MAILED: 07/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/887,630

Applicant(s)

CARLSSON ET AL. 

Examiner

Justin M Philpott

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PGT-Rule-17-2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities: "BSS 40" (page 5, line 4) should be changed to "BSS 60" in order to remain consistent with the figures.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,522,889 to Aarnio in view of U.S. Patent No. 6,259,923 to Lim et al.

Regarding claims 1, 5, 9, 13 and 17, Aarnio teaches a method of transmitting a location service message between a location server and a mobile station in a packet network (e.g., see FIG. 1). Specifically, regarding claims 1, 9 and 13, Aarnio teaches transmitting the location service message (e.g., location information, see col. 4, lines 18-27) in a downlink from the location server (e.g., LS 22) to a serving GPRS support node (e.g., GPRS network 14); and forwarding the location service message from the serving GPRS support node to the mobile station (e.g., MS 12). Furthermore, while Aarnio may not specifically disclose a step of

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transmitting the message from the location server to a base station subsystem prior to transmission to the GPRS support node, Aarnio teaches the GPRS support node receives location-related communications regarding a base station or group of base stations in communication with the mobile station (e.g., see col. 3, line 65 – col. 4, line 5). Lim also teaches a method for providing location service, and further, specifically teaches a base station serves as an intermediary for communications between a location server and a mobile station (e.g., see FIG. 1 and col. 3, lines 25-57). The method of Lim provides location service with reduced cost and complexity (e.g., see col. 5, lines 40-47). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the teachings of Lim to the method of Aarnio in order to reduce cost and complexity.

Additionally, regarding claims 5, 9 and 17, Aarnio teaches transmitting a location service message (e.g., request to identify MS location) between a mobile station and a location server in the opposite direction in an uplink (e.g., from the mobile station to the GPRS support node to the location server, see col. 3, lines 40-42).

Regarding claims 2, 7, 10, 14 and 19, Aarnio further teaches encapsulating (e.g., via conversion server 20, see col. 3, lines 8-14) the location service message (e.g., comprising digital image data) in a link control message (e.g., comprising text format) and transmitting the link control message from the GPRS support node (e.g., GPRS network 14) to the mobile station (e.g., MS 12) in the downlink, and from the mobile station to the GPRS support node in the uplink.

Regarding claims 3, 6, 11, 15 and 18, as discussed above regarding claims 1, 5, 9, 13 and 17, Lim teaches a base station serves as an intermediary for communications between a location

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server and a mobile station (e.g., see FIG. 1 and col. 3, lines 25-57). That is, Lim teaches relaying messages from the base station to the mobile station.

Regarding claims 4, 8, 12, 16 and 20, Aarnio teaches ciphering the link control message (e.g., converting digital image data to a text format, see col. 3, lines 8-10) and deciphering the link control message (e.g., wherein the location information may be take the form of a diagram or audible message, see col. 4, lines 18-27); wherein in the downlink ciphering occurs at the GPRS support node and deciphering occurs at the mobile station, and in the uplink ciphering occurs at the mobile station and deciphering occurs at the GPRS support node.

### *Conclusion*

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 5,845,211 to Roach, Jr. discloses a wireless digital network, and

U.S. Patent Application Publication No. US 2001/0005675 A1 by Aho discloses transferring location information messages.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin M Philpott whose telephone number is 703.305.7357. The examiner can normally be reached on M-F, 9:00am-5:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D Vu can be reached on 703.308.6602. The fax phone numbers for the

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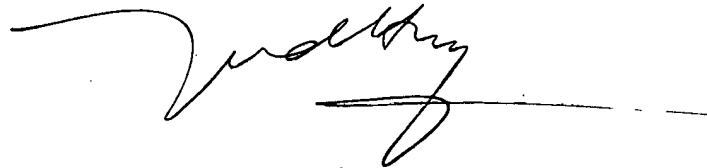
organization where this application or proceeding is assigned are 703.872.9314 for regular communications and 703.872.9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.305.4750.

Justin M Philpott



June 30, 2003



HUY D. VU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600